

rules, or after the issuance of any Commission finding on market definition that is contrary to the findings set forth herein, seeking modification or termination of these conditions. The Commission may, on its own motion, modify or terminate the conditions set forth above at any time if it finds such requirements are no longer necessary to mitigate or prevent potential public interest harms.³⁶⁵

B. Instant Messaging and Advanced IM-Based High-Speed Services.

128. In this section we analyze Instant Messaging ("IM"), new IM-based services, and advanced IM-based high-speed services ("AIHS")³⁶⁶ from the perspective of our well-settled statutory obligations. Based on the following analysis, and to ensure the public interest as set forth in 47 U.S.C. §§ 230(b) and 157 and elsewhere in the Communications Act is protected, we impose conditions on the merged parties.

129. We conclude the market in text-based instant messaging is characterized by strong "network effects," *i.e.*, a service's value increases substantially with the addition of new users with whom other users can communicate, and that AOL, by any measure described in the record, is the dominant IM provider in America. We further find AOL has consistently resisted interoperability with other non-licensed IM providers.³⁶⁷ AOL's market dominance in text-based messaging, coupled with the network effects and its resistance to interoperability, establishes a very high barrier to entry for competitors that contravenes the public interest in open and interoperable communications systems, the development of the Internet, consumer choice, competition and innovation.³⁶⁸ We also find that a Names and Presence Database ("NPD") is currently an essential input for the development and deployment of many, if not most, future high-speed Internet-based services that rely on real-time delivery and interaction.

130. Given these findings, the combination of Time Warner's high-speed information transmission assets and its programming content with AOL's current IM market dominance, substantially increases the probability that AOL's dominance in the narrowband text-messaging world will persist in the world of high-speed interactive services. For these reasons, we impose conditions to ensure that the

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promulgate, these conditions will govern unless otherwise specified by the Commission.

³⁶⁵ The conditions set forth above are not intended to require AOL Time Warner to offer any ISP connection to its cable systems, but instead to ensure that if and when the merged firm does agree to offer ISPs such connection, it does so in conformity with the requirements we delineate herein.

³⁶⁶ IM-based services are relatively new but have shown enormous growth in popularity in recent years. Their key characteristics are the capabilities to detect whether other users of the system (whose names are kept in a Names and Presence Database) are present online and to exchange messages with them in real time. These features, besides being useful in their own right, are predicted to have vast potential as a "platform" for the development of additional applications in the future, particularly as users obtain high-speed Internet access.

³⁶⁷ Users of AOL's IM service cannot currently send or receive messages to or from those who use other IM services -- *i.e.*, the services are not "interoperable." AOL contends its historical resistance to interoperability is rooted in its belief that it currently cannot adequately protect its customers' privacy and security. *See infra* para. 170.

³⁶⁸ Recent literature suggests that near monopoly outcomes in markets exhibiting strong network effects are "tipped markets." *See, e.g.*, Andrew Watson, *Predatory Pricing in the Software Industry*, 23 RUTGERS L. REC. 1 (1998) (citing David S. Evans and Richard Schmalensee, *A Guide to the Antitrust Economics of Networks*, 10 Spring ANTITRUST 36, 36-37 (1996)). Because our public interest authority is informed by market analysis but not determined by it, we express no opinion whether the factual conclusions in this *Order* can be characterized as amounting to a tipped market or not.

factors described in paragraph 129 above regarding narrowband text-messaging will not be reproduced and compounded by this merger.

131. We find that the public interest is served by interoperability among NPD-based services, first and foremost because interoperability will bring concrete and significant improvements to all consumers. With interoperability, communication between users that was inconvenient becomes convenient, communication that was impossible becomes possible, and new entrants are enabled to bring their innovations and creativity promptly to the largest possible number of users. Interoperability of NPD-based services will open new possibilities for communication for persons who are deaf or hard of hearing, persons with speech and/or learning disabilities, persons with cognitive limitations, and others for whom voice communication is problematic – who may come to rely on IM as a basic means of communication. They will be able not only to use new services, but also to interact with the perhaps 150 million users of IM all over the world. These improvements, in turn, will make these services more valuable to previously uninterested persons, drawing them to become users.³⁶⁹ As we explain in detail below, the network effects of the business, instead of entrenching the largest incumbent, will work to the benefit of all users. The rewards of success in the marketplace will go to the provider who offers the most value to consumers rather than automatically to the first provider who amassed a large body of users. Alternately, if a single provider achieves dominance by relying on network effects and refusing to interoperate, actual and potential competing providers will be driven from and kept out of the market, resulting in a loss in competition, innovation, and consumer welfare. Interoperability would also continue the long-standing tradition of the Internet being open and interoperable. In sum, interoperability will benefit consumers and be in the public interest because (i) it enables each user to communicate with the largest number of other users through one source, thus maximizing efficiency; (ii) it leads to more product and service choices and convenience for users; (iii) it leads to more competition, thus avoiding the need for regulation; and (iv) it leads to more innovation.

132. We begin with a description of current and anticipated Instant Messaging and NPD-based services and of our authority to examine the impact of the proposed merger on these services in reviewing the applications in this case. We then explain the "network effects" characteristics of these services, and the conditions under which an unregulated market is and is not likely to lead to interoperability among competing providers. We then find that the proposed merger would give AOL Time Warner substantial, and perhaps insurmountable, advantages in providing advanced IM-based services over the high-speed Internet platform.

133. While we recognize a number of factors that signal caution here, including the relative novelty of the services and the need to resolve security and privacy concerns, we must also weigh the danger of inaction where the window of opportunity to preserve competition and protect the other policies of the Communications Act may be narrow because the markets are changing rapidly. On balance, we find it appropriate to impose a narrow condition specifically tailored to address the potential harm to Communications Act objectives created by the combination of assets that will be permitted by granting the pending license transfer applications.

³⁶⁹ See Jim Hu, *AOL's Lead in Instant Messaging Arena Dwindles*, CNET NEWS.COM, Nov. 16, 2000 ("Instant messaging proponents claim the technology could be as pervasive and influential as the telephone if a common communication standard is established."), attached to Letter from Peter D. Ross, Esq., Wiley, Rein & Fielding, Counsel for AOL, to Magalie Roman Salas, Secretary, FCC, dated Nov. 17, 2000 ("AOL Nov. 17 Ex Parte").

1. Background

134. IM, in its simplest form, enables the almost instantaneous exchange of short, private, individualized text messages over the Internet between two users who are online simultaneously and are either in a “chat room”³⁷⁰ or on each other’s “buddy lists.”³⁷¹ Each Internet user may maintain a “buddy list” consisting of the IM names of the other users with whom he or she may wish to communicate via IM. A user may have several IM names or identities, such as one for work and another for business. Typically, when a user turns on her Internet access service, a box appears on the screen containing the names of those users who are on her buddy list and are also online.

135. A typical exchange begins when a user (“the sender”) sees from her buddy list that another user (“the recipient”) is online. The sender then brings up the IM box on her computer screen, types the recipient’s IM name, types a message (“Hi, how are you this morning?”), and then clicks “Send” or an analogous command that sends the message to the recipient over the Internet. An instant later, the sender’s IM name and message appear on the recipient’s Internet screen and the recipient may reply. The general purpose and effect of IM is to allow almost instantaneous communication between two persons, each of whom sees the other’s IM name on her screen and also sees that the other is online. IM enables them to communicate by exchanging personalized text messages privately and with a degree of informality and immediacy much like that of a face-to-face conversation or telephone call. Because IM messages are in text and are typically short, the speed (or “latency”) demands of the service are relatively modest and well within the narrowband “best efforts” Internet of today.

136. IM is especially beneficial to persons who are deaf or hard of hearing, persons with speech and/or learning disabilities, persons with cognitive limitations, and persons for whom voice communication is otherwise problematic. As a mass medium for the almost instantaneous exchange of text messages, as opposed to voice messages, IM can be as useful to these persons as telephone service is to persons who do not have such limitations.³⁷²

137. Following AOL’s pioneering efforts, IM became a mass market product in the late 1990s.³⁷³ In the short time since then, IM has mushroomed into a highly popular service, with an estimated 150 million users worldwide on AOL’s IM services alone.³⁷⁴ More than 30 million individuals

³⁷⁰ Typical “chat rooms” are groups of persons who have joined a group because of a common interest and who are online at the same time. Each person in a room may send a text message, which almost immediately appears on the screens of all persons in the room. Usually, ISPs limit the number of persons in a chat room at the same time in order to keep that chat manageable. IM, in the context of a chat room, occurs when one person in it wishes to exchange text messages with another person in it, but privately and without the others in the chat room.

³⁷¹ Tribal Voice Comments at 2.

³⁷² Testimony of Ross Bagully, President and CEO, Tribal Voice, FCC En Banc Hearing, CS Docket No. 00-30 (July 27, 2000) (“Bagully En Banc Testimony”), Tr. at 151 (“[T]here are 28 million deaf and hearing impaired American citizens who rely on instant messaging services, much like most of us use the telephone, . . .”); Letter from Nancy J. Bloch, Executive Director, National Association of the Deaf, to William E. Kennard, Chairman, FCC, dated July 26, 2000.

³⁷³ Letter from George Vradenburg III, Senior Vice President, Global and Strategic Policy, AOL, to Deborah Lathen, Chief, Cable Services Bureau, FCC, dated Sept. 29, 2000, at 3 (“AOL Sept. 29 Ex Parte”).

³⁷⁴ Some observers put the total number of registered IM service users under AOL’s control at over 150 million. Tribal Voice Comments at 1-2 (120 million); Julia Angwin, *Instant Messaging Services at AOL Quietly Linked*, WALL ST. J., Oct. 26, 2000, at B-1, B-4 (138 million); Jim Lynch, *Instant Messaging Roundup*, MSNBC Technology, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000) (more than 150 (continued...))

use IM at least once a month, and AOL transmits almost five times as many IMs a day as it does e-mails.³⁷⁵ From all appearances, the market is nowhere near saturation.

138. An essential input³⁷⁶ to an IM service is the provider's NPD.³⁷⁷ The names and presence indication, as displayed on the sender's and recipient's buddy lists and screens, enable each to know the other's IM name and when he or she is online or available. The actual NPD consists, first, of a database of the users' unique IM names and addresses and, second, of a "presence detection" function, which is the IM provider's knowledge, and its ability to inform others, that a certain user is online and therefore available to engage in instant messaging. The NPD is more than simply a customer list. It is a working part of an electronic communications network for persons who have requested participation in the network and actually use it to exchange communications in real time with other users.

139. Each IM provider has its own NPD, which constitutes the total universe of persons with whom that provider's users can engage in instant messaging. Until recently, IM providers did not share access to their NPDs with other providers. Some providers are starting to do so. Such sharing makes possible "interoperability," which is the ability of users of one IM service to engage in instant messaging with users of another IM service.

140. Many new services and applications based on "simple text" IM are being developed.³⁷⁸ A few companies, including AOL, are already providing them to their IM users.³⁷⁹ Many experienced industry observers believe that these new services, including AIHS, will be popular.³⁸⁰

141. The new IM-based services include sending, along with a text message, attachments such as documents; using IM as a way to access shopping, personal homepages, and calendars,³⁸¹ using

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million users); Nick Wingfield, *Changing Chat*, WALL ST. J., Sept. 18, 2000, at R-28 (154 million registered users).

³⁷⁵ *IM Interoperability: The Need for Minimum Safeguards* at 2, White Paper filed herein ("First IM White Paper") under Letter from Ross Bagully, President and CEO, Tribal Voice, and Margaret Heffernan, President and CEO, iCast, to Magalie Roman Salas, Secretary, FCC, dated Sept. 5, 2000 ("Tribal Voice and iCast Sept. 5 Ex Parte"); Nick Wingfield, *Changing Chat*, WALL ST. J., Sept. 18, 2000, at R-28.

³⁷⁶ An essential input is a component of a service or product without which the service or product cannot be created and provided to others. For example, a channel tuner is an essential input to a television set and a compressor is an essential input to a refrigerator.

³⁷⁷ See, e.g., Letter from Karen B. Possner, Vice President - Strategic Policy, BellSouth Corp., to Magalie Roman Salas, Secretary, FCC, dated Oct. 10, 2000, Attachment (BellSouth's Views on the Effect of the Proposed America Online-Time Warner Merger on Instant Messaging and Related Capabilities) at 1.

³⁷⁸ Confidential Appendix IV-B-1, Note 1.

³⁷⁹ AOL provides IM in basically three ways. First, it includes IM in its basic proprietary Internet access service. Second, AOL Instant Messenger, or "AIM," is available at no charge to subscribers to other Internet access services. Third, AOL acquired an IM company called ICQ, which it has kept separate from its other services. See Confidential Appendix IV-B-1, Note 2.

³⁸⁰ See Jim Hu, *AOL's Lead in Instant Messaging Arena Dwindles*, CNET NEWS.COM, Nov. 16, 2000 ("Instant messaging proponents claim the technology could be as pervasive and influential as the telephone if a common communication standard is established."), attached to AOL Nov. 17 Ex Parte; Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000) ("IM can drive up a site's traffic and brand awareness. It will be an important feature of interactive television; it . . . can add real-time customer services to a site."). See Confidential Appendix IV-B-1, Note 3.

presence detection as a trigger to perform "intelligent agent" functions such as selective message routing and instant alerts, automatic responses, filtering out unwanted messages,³⁸² sending individual users advertising, and time-sensitive personalized information such as news bulletins on pre-chosen subjects,³⁸³ stock quotes, and travel arrangements;³⁸⁴ and ordinary web surfing.³⁸⁵ Some of these new services are appearing on wireless devices such as cellphones and Personal Digital Assistants such as "Palm Pilots" and "Pocket PCs."³⁸⁶ These new services are also expected to be included in interactive television to allow, among other things, text chatting (for example, among faraway friends watching the same football game), obtaining information (for example, getting the statistics of a football player who has just come on the field) and shopping on the Internet (for example, for a team mascot or some other souvenir of a football game).³⁸⁷

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³⁸¹ iCast Comments n.5; Tribal Voice Comments at 2; Disney July 25 Ex Parte at 21-22; Ariana Eunjung Cha, *AOL Unmoved in Software Dispute*, WASH. POST, Aug. 24, 2000, at A-1, -14; Jim Lynch, *Instant Messaging Roundup*, MSNBC Technology, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000).

³⁸² eWeek, Dennis Fisher, *Small Talk Goes Big Bucks*, ZDNet, at <http://www.zdnet.com/eweek/stories/general/0,1101,2631584.00.html> (visited Oct. 30, 2000).

³⁸³ See, e.g., Tribal Voice Comments at 6-7; iCast Comments at 8 and nn.17-18; America Online, Inc., *America Online and Time Warner Announce New Content and Promotional Agreements* (press release), Feb. 16, 2000 (visited Aug. 1, 2000) (ICQ and "CNN Interactive will develop a co-branded news offering to be distributed through . . . the ICQ client.").

³⁸⁴ iCast Comments at 8 and nn.17-18. The presence detection aspect of IM would enable an IM provider, for example, to send the latest news to an IM user who has just come online or to advise a user with a ticket on a 7 o'clock flight that a seat on a 6 o'clock flight has just become available and can be reserved if the user replies within the next minute. See, e.g., Randall E. Stross, *America's Bad Call: We're Way Behind Others When It Comes to Web Phones*, U.S. NEWS & WORLD REP., Sept. 4, 2000, at 2000 WL 7718658 ("Japanese 'Web phones,' like high-speed PCs, appear always on and offer a daily cartoon, weather reports, horoscopes, train schedules, bank account information, and stock quotes . . . Japan Airlines already sells 20,000 tickets a month on the service, a feat enabled by designers who figured out ways to let users get to schedules in two clicks. By contrast, an American punching a Web phone needs seven [clicks] just to get a flight number").

³⁸⁵ See Barbara Darrow, *Instant Messaging Market in Flux*, TECHWEB, Dec. 5, 2000, at <http://www.techweb.com/wire/story/TWB200011204S0018> (visited Dec. 5, 2000) ("a group of buddies can cruise websites together"); William Whyman, *Instant Messaging: the Next Web Killer App?*, Precursor Group, July 31, 2000.

³⁸⁶ See, e.g., Irene M. Kunii, *Look Who's Going Courting in Japan*, BUSINESS WEEK, Aug. 7, 2000, at 2000 WL 24484561 ("The speculation is that AOL content could be available on i-mode phones if a deal is reached, possibly in August. . . . [AOL] sees wireless gadgets overtaking the PC as the most popular way to access the Net in the coming years. . . . AOL has developed unique services that could be transplanted to the wireless Net, such as instant messaging, which could be used as a locator device in the future. It could enable delivery of AOL's international content to i-mode users, . . ."). In addition, IM will be available via wireless devices. See, e.g., Neil Irwin, *AOL Debuts E-Mail/IM Pager*, WASHTECH.COM, Dec. 1, 2000, at <http://washtech.com/news/media/5560-1.html> (visited Dec. 1, 2000); *New Media*, COMM. DAILY, Oct. 20, 2000 ("Sprint PCS unveiled plans to make AOL Instant Messenger available on its Internet-enabled phones, providing text-to-text messaging service, nearly 2 days after AT&T Wireless announced similar plans for short-message service . . . Announcements mark first forays by U.S. carriers into instant text-messaging on wireless phones, service that has seen particularly rapid growth in Asia and Europe.").

³⁸⁷ See also Letter from Margaret Heffernan, President and CEO, iCast, to Magalie Roman Salas, Secretary, FCC, dated Oct. 10, 2000 ("iCast Oct. 10 Ex Parte"), Attachment (Testimony of Ms. Heffernan before the House (continued...))

142. Some of these new IM-based services -- and perhaps the most important ones in the long term -- are bandwidth-intensive and therefore will work best with high-speed Internet access. These AIHS include time-sensitive, "latency-dependent" applications such as talking (e.g., a Talk Feature that enables users to engage in live conversation online and is included in AIM 4.1), game-playing (e.g., features in AOL's New Windows AIM 4.3,³⁸⁸ buddies jointly 'playing along' with popular quiz shows such as Jeopardy! or Who Wants to Be a Millionaire?, or enacting their own versions of those shows online, independent of television broadcasts), and buddies sending each other brief music and video clips.

143. Even more bandwidth-intensive will be video conferencing via IM,³⁸⁹ which at least one study group predicts will be a major success in the marketplace.³⁹⁰ Also, many kinds of streaming video broadband content will likely be delivered via IM to both home and business users in forms such as long video entertainment and business documents in video form.³⁹¹ Finally, AIHS on interactive television

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Subcommittee on Telecommunications, Trade and Consumer Protection, Oct. 6, 2000) at 2 ("Heffernan House Testimony"); Letter from Margaret Heffernan, President and CEO, iCast, to Magalie Roman Salas, Secretary, FCC, dated Oct. 5, 2000 ("iCast Oct. 5 Ex Parte"), Attachment (Instant Messaging Is an Important Platform for Both Current and Next Generation Internet Applications) ("Instant Messaging Is an Important Platform") *passim*; Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000); Holly Becker and Kevin Sullivan, *America Online*, Lehman Brothers June 29 Report, at 42.

³⁸⁸ America Online, Inc., *AOL Instant Messenger, New Windows AIM 4.3 - Available Now*, at <http://www.aol.com/aim/home.html>, (visited Nov. 17, 2000) ("Play online games against your AIM Buddies"); Letter from Peter D. Ross, Esq., Wiley, Rein & Fielding, counsel for AOL, to Magalie Roman Salas, Secretary, FCC, dated Oct. 19, 2000 ("AOL Oct. 19 Ex Parte"), Attachment (Microsoft "Windows Me" web page ("With MSN Messenger Service in Windows Me, you can: . . . Invite a friend to play a DirectPlay® game directly from within MSN messenger Service."))).

³⁸⁹ AOL Oct. 19 Ex Parte, Attachment (Microsoft "Windows Me" web page ("With MSN Messenger Service in Windows Me, you can: . . . Go instantly from a text chat to a video conversation with NewMeeting® 3.1.")); Stephanie Sanborn, *Novell Updates Instantme, Net Publisher*, INFOWORLD DAILY NEWS, Aug. 1, 2000, at 2000 WL 22975572 ("Available as a free download on Aug. 4, instantme 2.0 . . . includes the option of extending IM communications with audio and video IM technology from CuSeeMe Networks. . . . The inclusion of audio and video IM technology will give businesses users the chance to 'do a quick video conference' on a point-to-point basis, Gailey said."); *Instant Messaging Is an Important Platform* at 1 ("IM is a natural platform for . . . video-based conferencing . . ."), Attachment to iCast Oct. 5 Ex Parte. See also Kate Gerwig, *Akamai Targets Content Delivery At Business Users*, CMP TECHWEB, June 7, 2000, at 2000 WL 2666827 ("Akamai's conference casting pairs traditional telephony with Internet-based streaming media technology to deliver what is designed to be a more cost-effective way to provide audio and video conferencing. . . . The service also has features such as on-demand replay, instant messaging, and polling, which are not available in traditional audio or video conference calls."); Steve Gillmor and Jeff Angus, *Exchange 2000 Finally Delivers Collaboration*, INFORMATION WEEK, Dec. 13, 1999, at 1999 WL 21900099 ("The addition of a spectrum of collaborative features may be the most important change in the new Exchange. . . . Beta 3 has instant messaging and real-time data and video conferencing services that can be deployed across the intranet."); *Instant Messaging Is an Important Platform* at 2 ("Lotus and Novell . . . also plan to add . . . video . . . versions thereby allowing business to hold meetings with multiple people instant messaging each other."), Attachment to iCast Oct. 5 Ex Parte.

³⁹⁰ *Some 28 Pct of World Mobile Subscribers Seen Using 3G Services by 2010 - Study*, AFX NEWS, Oct. 11, 2000, ("[A]ccording to a study published online today by the UMTS Forum[,] . . . six service categories that will generate the majority of revenues in 3G's early years . . . include . . . access to multimedia instant messaging services . . . and 'rich voice' services such as video conferencing and voice over IP.").

³⁹¹ See *Instant Messaging Is an Important Platform* at 1 ("IM is a natural platform for . . . video-related services and applications . . ."), 2 ("as broadband technology is more widely deployed, 'video' services could also, in a (continued...)

could include IM chat buddies jointly seeing streaming video highlights of a football player's best plays.³⁹²

144. Quality of Service ("QoS") will be especially important for AIHS.³⁹³ This is because delivering AIHS, compared to simple text IM, is relatively complicated and susceptible to degradation; and because slow or choppy delivery can degrade the value of an AIHS seriously or totally.

145. Despite the quantum leap that all these new services represent beyond IM, they are like IM in one respect. That is, a provider of AIHS depends on its NPD as much as a provider of IM does.³⁹⁴ Absent interoperability, an AIHS provider's database of users' names is the total universe with whom one user can swap video clips, engage in video conferencing, and so on.

2. Discussion

146. *Authority. The Public Interest.* We are obligated under the Communications Act to ensure that the transfer of control of Time Warner's cable licenses serves the public interest.³⁹⁵ We determine the public interest with reference to the policies and goals of the Communications Act and related statutes. Thus, as stated in Section II, Public Interest Framework, we examine whether a

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competitive market, be expected to be available over the IM platform." (footnote omitted)), Attachment to iCast Oct. 5 Ex Parte; Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000) ("So what does the future hold for IM? . . . [S]treaming media . . ."); William Whyman, *Instant Messaging: the Next Web Killer App?*, Precursor Group, July 31, 2000 (IM "can support . . . the ability to drag and drop video . . . files"); First IM White Paper at 2, Attachment to Tribal Voice and iCast Sept. 5 Ex Parte; Letter from Johnny Scarborough, Jr., Vice President, Advanced Technology, iCast, to Magalie Roman Salas, Secretary, FCC, dated July 25, 2000, Untitled Attachment at 5 ("IM enables richer communication . . . video, file sharing") and 7 ("Tomorrow . . . Content licensing (music, news, video)") ("iCast July 25 Ex Parte").

³⁹² AOL itself is promoting many kinds of streaming video, especially on high-speed platforms (xDSL, high-speed cable modems, etc.), as part of its latest and upcoming offerings of Internet access. The offerings include IM, although AOL is not specifically touting streaming video in connection with it. See, e.g., *AOL and RealNetworks Announce Strategic Agreement to Deliver Streaming Digital Media Through AOL Services*, NEW MEDIAMUSIC.COM HEADLINES TODAY, July 13, 2000, at <http://www.newmedia...71300.html> ("high-quality streaming digital media," "compelling audio and VHS video quality") (visited Dec. 27, 2000); John Townley, *AOL Plus Provides Enhanced Streaming Broadband*, INTERNETNEWS - ISP NEWS, April 4, 2000, at http://www.internetnews.com/isp-news/article/0,,8_333621,00.html (streaming video news coverage from Fox News and Sports, "streaming, dynamic mapping images from weather.com," streaming video sports highlights, "streaming market analysis and video wrap-ups") (visited Dec. 27, 2000); John Townley, *AOL to Deploy Akamai Servers*, INTERNETNEWS - STREAMING MEDIA NEWS, Feb. 16, 2000, at http://www.newmediamusic.com/ps/real_aol_71300.html ("large audio and video streaming events") (visited Dec. 7, 2000).

³⁹³ "QoS" refers to all indicia of quality in interconnection and access arrangements, including: the good faith with which they are described, offered and made available by their possessor (in this case, AOL Time Warner); their technical capacity and functionality; their reliability; their performance characteristics, including security from any change in content or display; any price; and the promptness of their installation, maintenance, repair, and disconnection.

³⁹⁴ An NPD used for AIHS could also perform functions not needed in IM, such as advising a user wanting a video conference with another user about the other user's video conferencing equipment and whether their equipment is compatible.

³⁹⁵ 47 U.S.C. § 310(d).

transaction would substantially frustrate the Commission's implementation or enforcement of, or interfere with the objectives of, the Communications Act or related statutes. Accordingly, in conducting our public interest analysis, we do not examine those issues that are not communications-related.³⁹⁶ But where an issue may be said to be fairly related to the policies and goals set forth in the Communications Act and related statutes, as is the effect of the merger of AOL and Time Warner on advanced IM services, we are required to satisfy ourselves that the public interest would be served by our approval of the transaction before us.

147. Our authority to examine the public interest effects associated with the combination of AOL's NPD and Time Warner's assets and to place any necessary conditions on our approval of the transfer of Time Warner's licenses rests on several statutory grounds. Sections 214(a) and 310(d) of the Communications Act require the Commission to determine whether the Applicants have demonstrated that the public interest would be served by transferring control over Time Warner's licenses and authorizations.³⁹⁷ Further, we have broad authority to attach conditions to a transfer of lines and licenses to ensure that the public interest is served by the transaction. Section 303(r) of the Act authorizes the Commission to prescribe restrictions or conditions, not inconsistent with law, that may be necessary to carry out the provisions of the Act.³⁹⁸ Similarly, Section 214(c) of the Communications Act authorizes the Commission to attach to the certificate "such terms and conditions as in its judgment the public convenience and necessity may require."³⁹⁹

148. Moreover, IM, new IM-based services (including AIHS in particular), and AOL's NPD are subject to our jurisdiction under Title I of the Communications Act.⁴⁰⁰ Our jurisdiction flows from at least three sections of the Communications Act. Section 1 of the Communications Act established the Commission "[f]or the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States . . . adequate facilities at reasonable charges . . ."⁴⁰¹ Similarly, Section 2 gives us jurisdiction over "all interstate and foreign communication by wire or radio" and "all persons engaged within the United States in such communication . . ."⁴⁰² Finally, Section 3 defines "communication by wire" and "communication by radio" as including "the transmission . . . of writing, signs, signals, pictures and sounds of all kinds . . . including all instrumentalities, facilities, apparatus, and services (among other things, the receipt, forwarding, and delivery of communications) incidental to such transmission."⁴⁰³ We find that IM and AIHS fall well within Section 3's definitions of radio and wire communication, as does the NPD as an instrumentality, facility, apparatus, or service incidental to the IM and AIHS. Accordingly, the Commission has Title I jurisdiction over IM and AIHS services.⁴⁰⁴ This being clear, we need not classify

³⁹⁶ For example, while in a merger of two taxi companies, we might be required to approve the transfer of control of various radio licenses, in making our decision we would not examine the effect of the merger on taxi service to the public. That task is for others.

³⁹⁷ 47 U.S.C. §§ 214(a) and 310(d).

³⁹⁸ 47 U.S.C. § 303(r).

³⁹⁹ 47 U.S.C. § 214(c).

⁴⁰⁰ 47 U.S.C. §§ 151 *et seq.*

⁴⁰¹ 47 U.S.C. § 151.

⁴⁰² 47 U.S.C. § 152.

⁴⁰³ 47 U.S.C. § 153.

⁴⁰⁴ *Cf. Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the*
(continued...)

IM and AIHS as information services, cable services, or telecommunications services (as some allege) – the Commission has subject matter jurisdiction over them.

149. While several commenters agree that the Commission has “clear jurisdiction” to impose conditions on IM here, citing, *inter alia*, Sections 1, 2, 230(b)(2), 310(d), and 256, and Title VI of the Communications Act,⁴⁰⁵ AOL argues that there is no such jurisdictional nexus.⁴⁰⁶ AOL’s argument, despite its jurisdictional phraseology, amounts to a claim that its position on the merits is correct, namely that the IM business is competitive and the IM issues raised in this proceeding are not merger-specific. As we find below, however, the IM business is not competitive, and AOL’s acquisition of Time Warner’s content, cable assets and control of Road Runner will be contrary to the public interest.

150. In deciding whether the transfer of control of the licenses and authorizations at issue here is in the public interest, as discussed above in Section II, we consider, *inter alia*, whether the merger would interfere with the policies and objectives of the Communications Act. Several policies and objectives are implicated by this merger. First, in enacting the Telecommunications Act of 1996,⁴⁰⁷ Congress established a clear national policy that competition leading to deregulation, rather than continued regulation of dominant firms, shall be the preferred means for protecting consumers.⁴⁰⁸ Further, to promote the policies of the Communications Act, we may “plan in advance of foreseeable events instead of waiting to react to them.”⁴⁰⁹ We may therefore examine and place conditions on a merger to ensure that it will not impede the development of future competition but will, in fact, enhance competition.⁴¹⁰ Congress expressed its preference for similar policies with respect to the Internet. Section 230(b) of the Communications Act provides that it is a policy of the United States “to promote the continued development of the Internet and other interactive computer services and other interactive media” and “to preserve the vibrant and competitive free market that presently exists for Internet and other interactive computer services, unfettered by Federal or State regulation.”⁴¹¹ Finally, Congress has

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Telecommunications Act of 1996; Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities, WT Dkt. No. 96-198, Report and Order and Further Notice of Inquiry, FCC 99-181, ¶¶ 96-98 (rel. Sept. 29, 1999).

⁴⁰⁵ See, e.g., Tribal Voice and iCast Sept. 5 Ex Parte, at 22-27, 29-33; iCast Oct. 10 Ex Parte at 1-7. These commenters further claim that the Commission’s ancillary jurisdiction authority also provides grounds for imposing a condition on IM interoperability. Tribal Voice and iCast Sept. 5 Ex Parte at 27-29.

⁴⁰⁶ AOL Sept. 29 Ex Parte. iCast replies that AOL’s submission, when read carefully, does not dispute the Commission’s jurisdiction to impose IM-related conditions. Rather, according to iCast, AOL’s arguments consist of reasons why the Commission should choose not to exercise such jurisdiction in this instance -- reasons that iCast strongly disputes. iCast Oct. 10 Ex Parte, at 1.

⁴⁰⁷ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

⁴⁰⁸ Joint Statement of Managers, S. Conf. Rep. No. 104-230 at 1 (1996).

⁴⁰⁹ See *United States v. Southwestern Cable Co.*, 392 U.S. 157, 177 (1968), quoting *Amendment of Subpart L, Part 11 to Adopt Rules & Regulations to Govern the Grant of Authorizations in the Business Radio Service for Microwave Stations to Relay Television Signals to Community Antenna Systems*, First Report and Order, 38 FCC 683, 701 (1965).

⁴¹⁰ See *WorldCom-MCI Order*, 13 FCC Rcd at 18034-35 ¶ 14; *Bell Atlantic-NYNEX Order*, 12 FCC Rcd at 19987 ¶2.

⁴¹¹ 47 U.S.C. § 230(b)(1), (2). See also *Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; End User Common Line Charges*, First Report and Order, 12 FCC Rcd 15982, 16133 ¶ 344 (1997).

charged the Commission with “encouraging the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.”⁴¹²

151. Several commenters argue that we may impose conditions on IM services to remedy anticompetitive harms, and that doing so would be consistent with our prior decision in *WorldCom-MCI*.⁴¹³ In *WorldCom-MCI*, we held that because the merger raised anticompetitive concerns regarding the Internet backbone service market, it was necessary for the Commission to review the applicants’ proposed divestiture of one of their Internet backbone services to ensure that those anticompetitive concerns were met, even though the applicants did not need our “approval” to complete that divestiture.⁴¹⁴ AOL finds the analogy to Internet backbone service to be inapposite, claiming that IM is not a facility or transmission service that the Commission regulates, but an information service that the Commission has chosen not to regulate.⁴¹⁵ Those commenters who seek to impose a condition on IM or AIHS also cite Section 230(b) of the Communications Act as support.⁴¹⁶ We agree, in part because our decision in *WorldCom-MCI*⁴¹⁷ supports our examining this merger to ensure that it does not have an anticompetitive effect on the provision of AIHS. The fact that we have chosen not to subject IM and AIHS to traditional regulation does not mean that the merger’s effects on these services escapes our inquiry.⁴¹⁸ In fact, exactly the opposite is true. Because we have jurisdiction over IM and AIHS but, mindful of Congress’s intent, have chosen not to regulate them, it is all the more important that we ensure that this merger does not cause any anticompetitive harms with regard to these services. Only in this way can we “preserve the vibrant and competitive free market that presently exists for Internet and other interactive computer services” and ensure that competition, rather than regulation, protects consumers.

152. *Relevant Markets.* After reviewing all the parties’ submissions and making our own analysis of the businesses in question and relevant economic principles, we find that the area of our concern is “NPD services” – interactive communication services which, as we described above, depend on an NPD for real time communication between and among users. Today, the principal services of this type are IM, the emerging new IM-based services, and AIHS in particular. In the following paragraphs, we find that the database of names and the presence detection ability of an NPD cause services that depend on an NPD to be characterized by strong network effects. These and other aspects of NPD services cause them to have few, if any, substitutes.⁴¹⁹ We further recognize that IM services are evolving rapidly, and we expect that this evolution will continue as more home users come to use high-speed

⁴¹² Section 706 of the Telecommunications Act of 1996, Pub. L. 104-104, Title VII, § 706, 110 Stat. 153, set forth at 47 U.S.C. § 157 nt.

⁴¹³ *WorldCom-MCI Order*, 13 FCC Rcd at 18103-04 ¶ 142.

⁴¹⁴ *Id.* at 18104 n.381.

⁴¹⁵ AOL Sept. 29 Ex Parte, at 16.

⁴¹⁶ Tribal Voice and iCast Sept. 5 Ex Parte at 29-33; iCast Oct. 10 Ex Parte at 5-6.

⁴¹⁷ *WorldCom-MCI Order*, 13 FCC Rcd at 18103-04 ¶ 142.

⁴¹⁸ By “traditional regulation,” we mean ongoing scrutiny, intense in the case of dominant providers, of entry and exit, prices, and service offerings and quality.

⁴¹⁹ For example, in an IM chat in a Civil War chat room between “Johnny Reb” and “Yankee Doodle Dandy,” those two individuals may not know each other’s names and telephone numbers. Each may have come into contact with the other simply by being simultaneously in the Civil War chat room. Therefore, the “conversation” they conduct via instant messaging would probably not have occurred on the telephone network.

platforms for Internet access.⁴²⁰ A more precise definition of the relevant market is not necessary here, where the Commission can accurately assess the competitive impact of the merger without such a detailed analysis.⁴²¹

153. *General Characteristics of NPD Services. Network Effects.* Certain services, such as telephone services, become more attractive to customers as more customers use them, a phenomenon called "network effects." Network effects tend to be strongest in businesses whose main output or product is access to other persons, as is the case with telephone service.

154. Often, in businesses with strong network effects, each of several providers creates its own network that is potentially incompatible with the others'. If each of the networks is of roughly equal size, then no provider dominates the market and each has an incentive to interoperate -- to make its service compatible -- with the others. In such an equilibrium, interoperability gives each provider's users access to a larger universe of other users and that makes each service more valuable to its users.⁴²² This equilibrium leads to effective competition and benefits consumers.

155. A different outcome, and one less beneficial for consumers, can also occur in markets with strong network effects. If one provider achieves a larger market share, either through superior performance or a first mover advantage,⁴²³ then it may not have an incentive to interoperate. If that provider wants to dominate the market, it can adopt a strategy of refusing to interoperate with the other, smaller providers. This, compared to a strategy of interoperation, will make its service less valuable and will hurt its users. But while these ill effects will be relatively slight, because the users will still be able to reach most other users, refusing to interoperate will hurt the smaller providers and their users greatly, because their users will not be able to reach most other users. The largest provider's refusal to interoperate will lead to users switching to it from the smaller providers, which will further swell the dominant provider's NPD and shrink the smaller ones'.⁴²⁴ This will continue until the largest provider's

⁴²⁰ Since the early 1980's at very least, economists and antitrust practitioners have recognized the existence of "innovation markets" in which identifiable firms engage in research and development on new products that are intended to appeal to the same buyers. It may even be that none of these emerging products have been created. See, e.g., Daniel Rubinfeld, *Competition, Innovation, and Antitrust Enforcement in Dynamic Network Industries*, March 24, 1998, Speech at Software Publishers' Ass'n; Christine A. Varney, *Why Innovation Market Analysis Makes Sense*, March 15, 1995, Speech at Antitrust 1995 Conference, at 1995 WL 112078; Richard J. Gilbert and Steven C. Sunshine, *Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets*, 65 ANTITRUST L. J. 569 (1995).

⁴²¹ See *AT&T-TCI Order*, 14 FCC Rcd 3160, 3205 ¶ 92 (1999); *AT&T-MediaOne Order*, 15 FCC Rcd at 9866 ¶ 116. See also *FCC v. RCA Commun. Inc.*, 346 U.S. 86, 96-97 (1953) (FCC not required to base its public interest analysis on the type of "tangible evidence appropriate for judicial determination," but is permitted to rely on its expertise to make predictive judgments).

⁴²² If any one provider decided not to interoperate, then its users would find themselves cut off from the majority of other users. They would quickly defect to another provider who did interoperate, thereby gaining access to all users other than those on the non-interoperating service. The holdout service would quickly lose all its users or be forced to change its decision and interoperate. Thus, in this situation it is not profitable for any provider to refuse to interoperate.

⁴²³ A first mover advantage is an advantage that may accrue to the first firm to introduce a new service, such as low marketing costs resulting from a lack of rivals. Dennis W. Carlton and Jeffrey M. Perloff, *MODERN INDUSTRIAL ORGANIZATION* at 113 (1994).

⁴²⁴ Of course, unique features that are especially attractive to small groups of users may win them away from the service that is most popular. For example, a small closed service may be preferable to users who desire greater
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network is the dominant one, perhaps yielding the provider monopoly control of the market. From that point onwards, the dominant network remains dominant, not necessarily because it charges the lowest prices, offers the best quality, or innovates fastest with the features that customers want most, but simply because in the past it gained the most users.⁴²⁵

156. Where there is no interoperability, the network effects of a service can be mitigated if competing providers or users of another service can provide an "adapter." An adapter is a facility or activity that enables users of one service to benefit, in full or in part, from the network effects of another.⁴²⁶ The absence of an adapter can lead to inconvenience and inefficiency. For example, in the early 20th century, a telephone subscriber who wanted access to every other telephone subscriber had to establish accounts with several telephone companies, have several telephones and telephone directories, and perhaps consult the directories each time he wanted to call someone to find out which system(s) that person subscribed to. Most consumers preferred that all telephone systems be interconnected and unified.⁴²⁷ These conditions led to monopoly and, ultimately, federal and state regulation.

157. The dominant provider of a service with network effects can exploit its dominant position as it offers new services that also have network effects. The provider can do so by making its new service compatible with its existing one ("backward compatibility"). This extends the network effects of the existing service into the new business and helps to migrate the provider's users from its existing service to the new one. Backward compatibility is efficient to the extent that it allows users to benefit from both the features of the new service and the network effects of the old service. If, however, it occurs where there is no interoperability, then backward compatibility can serve to lengthen and widen the dominant provider's power, to the harm of consumers and efficiency. The actual, or even potential, introduction of new backward compatible services by the largest provider can also stifle innovation, as potential entrants will be unlikely to invest in new services, knowing the disadvantage that they have in competing with the largest provider.

158. *Findings About NPD Services.* We find that NPD services exhibit strong network effects. Our first basis for this finding is simply that IM strongly fits the above definition of a business that is characterized by network effects. If an NPD service has only one user, the service is useless to her because she is the only user in the NPD and there is no one with whom to engage in instant messaging. When a second user joins the service, NPD grows and the IM service based on it becomes useful.⁴²⁸ Each

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privacy and security. Other factors may also make other small services preferable to small groups of users.

⁴²⁵ Ultimately, new technology may overcome the dominant provider's power, as the telephone did to the telegraph and airplanes and automobiles did to railroads. Many years can pass, however, before a new technology appears with enough advantages to overcome the entrenched one. That technology, too, may be deployed by the dominant incumbent, who will deploy it slower than a new entrant would. Finally, some technologies persist for very long times, such as the QWERTY keyboard.

1. ⁴²⁶ For example, when three different speeds were in use for phonographic records (33 1/3, 45, and 78 rpms), one adapter was a record player that could operate at all three speeds. Another was the small plastic disks that fitted in the wide holes at the center of 45 rpm records and made them useable on record players that had thin spindles.

⁴²⁷ Milton Mueller, Jr., *UNIVERSAL SERVICE: COMPETITION, INTERCONNECTION, AND MONOPOLY IN THE MAKING OF THE AMERICAN TELEPHONE SYSTEM* at 134 ("More often than not, voters, city councils, and statewide referenda weighed in on the side of universal service and consolidation."), 136-45 (1997).

⁴²⁸ IM, in this respect, is like the telephone, of which AT&T once said: "A telephone -- without a connection at the
(continued...)

additional user makes the NPD larger and the IM service based on it more useful to both its existing users and to potential users. Most users of IM want to be able to compose their buddy lists from, and/or engage in IM with, the largest number of other users. Therefore, when choosing between rival IM services, a typical new user will place the greatest value on the service with the largest NPD (and therefore the most users) and will choose that service. In all these hypothetical situations, the underlying value (or lack of value) in an IM service resides in the NPD.

159. Second, many observers agree that IM services exhibit strong network effects.⁴²⁹ Third, although AOL's filings before us almost deny that there are any network effects in IM, or that any such effects benefit only AOL,⁴³⁰ its promotions attempt to attract new users by proclaiming how many millions of registered IM users it already has. Specifically, the top paragraph of its own web page for AIM 4.1 entices users with "[f]ind out what over 64 million people already know, . . ." (underlining in original).⁴³¹ Accordingly, we find that NPD services are characterized by strong network effects.

160. We find that AOL is by far the leading provider of IM today. Many commentators have concluded that it dominates IM.⁴³² AOL was the first company to successfully market IM to the mass market and thus gained a significant first mover advantage. According to all observers, AOL has a mass of users -- and, therefore, an NPD -- that is several times larger than any other provider's and is larger than all other providers' combined.⁴³³ And AOL's presence in IM is still growing.⁴³⁴ Furthermore, small IM providers have recently exited the market.⁴³⁵

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other end of the line -- is not even a toy or a scientific instrument. It is one of the most useless things in the world. Its value depends on the connection with the other telephone -- and increases with the number of connections." AT&T Corp., *Annual Report for the Year Ending Dec. 31, 1908*, at 21.

⁴²⁹ E.S. Browning and Greg Ip, *Six Key Myths That Led the Boom In Tech Stocks*, ASIAN WALL ST. J., Oct. 17, 2000, at 2000 WL-WSJA 23750599; Dan Carney and Catherine Yang, *Is AOL's Instant Messaging an Unfair Advantage?*, BUSINESS WEEK, July 3, 2000, at 2000 WL 7827524; Matt Carolan, *IMUnified Good, Government Bad*, INTERACTIVE WEEK FROM ZDWIRE, July 25, 2000, at 2000 WL 4067383; Alan Murray, *Changing Code: For Policy Makers, Microsoft Suggests a Need to Recast Models*, WALL ST. J., June 9, 2000, at 2000 WL-WSJ 3032437; William Whyman, *Instant Messaging: the Next Web Killer App?*, Precursor Group, July 31, 2000 ("AOL's IM is a closed service using proprietary protocols. With dominant market share this creates huge network effects.").

⁴³⁰ AOL Sept. 29 Ex Parte at 1.

⁴³¹ AOL, *New AIM 4.1 Available Now*, at <http://www.aol.com/aim/> (visited Oct. 11, 2000). See Confidential Appendix IV-B-2, Note 1.

⁴³² See, e.g., Julia Angwin, *Instant Messaging Services at AOL Quietly Linked*, WALL ST. J., Oct. 26, 2000, at B-1 (referring to "AOL's dominance of instant-messaging technology"); Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000 (AOL "vastly outnumbering its competitors' numbers")); Nick Wingfield, *Changing Chat*, WALL ST. J., Sept. 18, 2000, at R-28 (in IM, AOL "has become the undisputed heavyweight"), B-38 (referring to "AOL's domination of the market" for IM); Prepared Testimony of Preston R. Padden, Executive Vice President of Government Relations, The Walt Disney Co., at 3 ("a near monopoly in Instant Messaging"), FCC En Banc Hearing, CS Docket No. 00-30 (July 27, 2000).

⁴³³ See, e.g., Letter from Peter D. Ross, Esq., Wiley Rein and Fielding, Counsel for AOL, to Ms. Deborah Lathen, Chief, Cable Services Bureau, FCC, dated Dec. 9, 2000, Attachments *passim*.

In a market characterized by strong network effects, a provider with a market share X times the size of another will, in fact, have more than X times the power of the other. In such markets, a participant's relative
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161. Independent companies have recognized the strength of AOL's IM by signing deals with AOL. These include both Sprint and AT&T agreeing to make AOL's IM available to their wireless customers⁴³⁶ and Sears agreeing to use instant messaging to connect Sears customers with Sears customer service representatives.⁴³⁷ EarthLink, a major direct competitor of AOL in the ISP business, has continued a licensing arrangement with AOL. EarthLink would be expected to compete with AOL in IM if that were possible. Finally, the continuing strength of AOL's IM has been recognized by a number of independent analysts.⁴³⁸ All this evidence strengthens our conviction that AOL's possession of by far the largest NPD confers great power on it.

162. AOL disagrees with the commenters who contend that it dominates IM. For example, AOL points to entry into the IM business by other providers and appears to claim that it does not benefit from network effects.⁴³⁹ We disagree. New entry may indicate competition, especially in a stable, mature business. IM is not such a business, however, and new entry into IM may also be explained by factors other than healthy competition. The smaller providers may be able to attract customers in a fast-growing market in which they offer extraordinary promotional inducements,⁴⁴⁰ may plan to succeed by targeting niche groups⁴⁴¹ or may be concentrating on very sophisticated features and functions.⁴⁴²

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strength may be measured not so much by its market share (N) as by N^2 in the case of one-to-one messaging and by 2^N in the case of group communications such as chat rooms and IM groups.

⁴³⁴ AOL Nov. 17 Ex Parte, Attachment (Growth in Unique Visitors to Instant Messaging Services 2000).

⁴³⁵ Jim Hu, *AOL's Lead in Instant Messaging Arena Dwindles*, CNET NEWS.COM, Nov. 16, 2000 (describing "the now-defunct CMGI-owned companies iCast and Tribal Voice") (emphasis in original), attached to AOL Nov. 17 Ex Parte.

⁴³⁶ See, e.g., Irene M. Kunii, *Look Who's Going Courting in Japan*, BUSINESS WEEK, Aug. 7, 2000, at 2000 WL 24484561; Neil Irwin, *AOL Debuts E-Mail/IM Pager*, WASHTECH.COM, Dec. 1, 2000, at <http://washtech.com/news/media/5560-1.html> (visited Dec. 1, 2000); *New Media*, COMMUN. DAILY, Oct. 20, 2000. See also America Online, Inc., *Open IM Architecture Design*, at <http://aim.aol.com/openim>, visited June 19, 2000 (licensees of AOL include Lotus, Lycos, EarthLink, and other ISPs).

⁴³⁷ See, e.g., Michael Brick, *AOL, Sears Form Alliance*, THESTREET.COM, March 14, 2000, at <http://www.thestreet.com/pf/brknews/internet/900219.html> (visited Dec. 13, 2000). By contrast, Yahoo! has been able to interest relatively few wireless providers in adopting its IM. See, e.g., *New Interactive Wireless Service from Motient Fortified With Yahoo! Now Available to Consumers Nationwide Via www.elinkhere.com*, PR NEWswire, Nov. 9, 2000.

⁴³⁸ Julia Angwin, *Instant Messaging Services at AOL Quietly Linked, Linked*, WALL ST. J., Oct. 26, 2000, at B-1; Jim Lynch, *Instant Messaging Roundup*, MSNBC Technology, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000); Nick Wingfield, *Changing Chat*, WALL ST. J., Sept. 18, 2000, at R-28; Louise Rosen, *Why IM Matters So Much*, UPSIDE TODAY, Sept. 19, 2000, at <http://www.upside.com/Ebiz/39c289380.html> (visited Sept. 19, 2000).

⁴³⁹ AOL Sept. 29 Ex Parte at 1.

⁴⁴⁰ See Letter from William L. Fishman, Esq., Swidler Berlin Shereff Friedman, LLP, counsel for RCN Telecom Services, Inc., to Magalie Roman Salas, Secretary, FCC, dated Dec. 21, 2000, at 3. See also Confidential Appendix IV-B-2, Note 2.

⁴⁴¹ Letter from Margaret Heffernan, President and CEO, iCast, and Shai Buber, President, Odigo Ltd., to Magalie Roman Salas, Secretary, FCC, dated Oct. 25, 2000, at n.2 ("iCast and Odigo Oct. 25 Ex Parte").

⁴⁴² See iCast Comments at 6; Tribal Voice Comments at 6-7 (alleging that services other than AOL's have better (continued...))

Because their offerings are unlikely to tempt a significant number of mass market users, however, they do not challenge AOL directly or significantly. Further, entry into IM may have been induced, despite network effects, by the prospect of interoperability with AOL. This prospect has been created by industry efforts; by expectations of governmental action by this Commission, the Federal Trade Commission, and/or Congress;⁴⁴³ and by AOL's own public statements pledging to help achieve interoperability.⁴⁴⁴ These factors may induce entry especially by those who believe that they will have advantages post-interoperability stemming from unique features and functions.

163. From among all entrants into the IM business, AOL points especially to Microsoft as a significant rival. AOL claims that Microsoft's presence, and especially its recent growth in the market, demonstrates that AOL does not dominate IM. AOL points to Microsoft integrating its IM product into its Windows desktop and to Microsoft's strength in desktop applications generally.⁴⁴⁵ We note that Microsoft is a potentially formidable competitor. However, Microsoft has not always been able to leverage its control of the Windows desktop into dominance of other applications.⁴⁴⁶ In addition, in IM today, AOL benefits from network effects and first mover advantages; and, as we discuss below, the proposed merger would give AOL significant, additional advantages over Microsoft, Yahoo!, and smaller IM providers. And even if Microsoft's NPD did grow to rival AOL's, the result would be merely a duopoly, not the healthy competition that exists today in electronic mail and that we hope will exist in new IM-based services and AIHS in particular.⁴⁴⁷

164. AOL also claims that any incompatibilities between its and other IM providers' NPDs are mitigated by an existing adapter for IM, namely that an IM user may use several IM services simultaneously,⁴⁴⁸ and that millions of users do so.⁴⁴⁹ AOL argues, therefore, that there are no barriers to entry into IM.⁴⁵⁰ We disagree. We find the ability of users to use several IM services is not a substitute for interoperability. Using several IM services (and, therefore, several NPDs) entails much

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features and are more innovative). The President and CEO of iCast claims that an AOL employee told her that iCast's "application was really cool." Heffernan House Testimony at 2, Attachment to iCast Oct. 10 Ex Parte. See also Jim Lynch, *Instant Messaging Roundup*, MSNBC Technology, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000), comparing several IM services based on their features, appearance, ease of use, and other aspects. See Confidential Appendix IV-B-2, Note 3.

⁴⁴³ iCast and Odigo Oct. 25 Ex Parte at 2.

⁴⁴⁴ Heffernan House Testimony at 2 ("we were hopeful that AOL would allow us to be interoperable . . ."), Attachment to iCast Oct. 10 Ex Parte.

⁴⁴⁵ AOL Oct. 19 Ex Parte at 3.

⁴⁴⁶ See, e.g., Dean Takahashi, *Zap! Bop! It's Web Comics*, ASIAN WALL ST. J. at 24 (Apr. 28, 2000), available at 2000 WL-WSJA 2938872; Bob Trott, *Microsoft Views AOL-Time Warner Deal as Confirmation of Its Own Strategy*, NETWORK WORLD FUSION (Jan. 12, 2000); Steven Manes, *Information Isn't Everything*, INFORMATIONWEEK (May 26, 1997), available at 1997 WL 7602548.

⁴⁴⁷ We find similarly unattractive the prospect of a tight oligopoly of three IM providers (AOL, Microsoft, and Yahoo!) predicted by AOL. See Oct. 19 Ex Parte and the Attachments thereto.

⁴⁴⁸ AOL Sept. 29 Ex Parte at 3, 5-6.

⁴⁴⁹ AOL Oct. 19 Ex Parte at 2-3 and attached charts and diagrams.

⁴⁵⁰ See, e.g., Letter, from Peter D. Ross, Esq., Wiley, Rein & Fielding, Counsel for AOL, to Magalie Roman Salas, Secretary, FCC, Sept. 19, 2000, at 4 ("barriers to entry simply do not exist") ("AOL Sept. 19 Ex Parte").

inconvenience. A user must download several kinds of IM software; must register and maintain accounts, unique names, and passwords with several IM providers; must use each one enough to become comfortable with its 'look and feel'; must keep several buddy lists and remember which buddies are on which IM service (and with what names); and must keep several IM sessions open simultaneously. Even then, three-way communications are impossible unless all participants use the same service. Indeed, in light of these inconveniences, the fact that millions of people use more than one IM service (especially AOL and one or more other services) indicates not easy adaptation but the great value that users put on being able to communicate with more, rather than fewer, people.⁴⁵¹ Maintaining multiple accounts, each with its own IM software, will be especially burdensome in hand-held devices. They have less storage capacity than desktop personal computers.⁴⁵² In addition, we understand that wireless carriers may choose one software (e.g., AOL's) and make use of others impossible. Lack of choice of IM services in hand-held devices will particularly hurt persons with hearing, speech, and other disabilities, to whom IM via hand-held devices can be as important as telephones and face-to-face conversations are to persons who do not have hearing limitations. In sum, we find that the ability to use several IM services and NPDs does not effectively mitigate the network effects that favor AOL's NPD.

165. AOL further contends that it does not dominate IM because it is possible for users to move in a coordinated group from one IM service to another. We find this not only inconvenient, but in most cases impossible as a practical matter. Only if those who propose to move have precisely the same buddy lists is this solution possible. Most likely, one user's buddy list does not correspond perfectly with his or her buddies' lists, in which case moving requires that at least some of one's buddies be left behind.⁴⁵³ Accordingly, we find that no adapter exists to mitigate the network effects of AOL's NPD.

166. AOL claims that entry into IM would be easy for any company with a customer list, especially a customer list as full as, for example, that of Sears or American Express. Again, we disagree. As we noted above, an NPD for IM must be a working part of an electronic communications network. Even the lengthy list of an interactive web service firm such as Amazon, E-Bay, Napster and Real Player would only be the starting raw material for entry into IM. Any of these would-be entrants would need to master a new business -- real-time, two-way, consumer-to-consumer interactive service. A would-be entrant would also need to launch a major marketing campaign to interest its customers in using its IM. Then millions of those customers would need to accept the invitation, download software into a personal computer or other interactive device, pick an IM name and find their buddies on the same service. From the entrant's original customer list, tens of millions of customers would need to finish all these steps for the resulting IM NPD to rival AOL's. We find that there are few companies that could seriously attempt such entry, and that even they would find many obstacles to successful entry.

167. Finally, it might be thought that in the rapidly changing technology of the Internet, even network effects and AOL's present position in the market would not prevent successful entry by IM providers other than AOL, that a new breakthrough technology might become available and would be superior enough to AOL's service to overcome the network effects flowing from its NPD, and cause users to shift *en masse* away from AOL. In some "serial monopoly" markets, one standard dominates a market

⁴⁵¹ See Letter from Erin M. Egan, Esq., Covington & Burling, Counsel for Microsoft Corp., to Magalie Roman Salas, Secretary, FCC, dated Nov. 20, 2000, at 1-2 ("Microsoft Nov. 20 Ex Parte").

⁴⁵² Letter from David Lawson, Esq., Counsel for AT&T, to Magalie Roman Salas, Secretary, FCC, dated Nov. 22, 2000, at 2 ("AT&T Nov. 22 Ex Parte").

⁴⁵³ See Confidential Appendix IV-B-2, Note 4. See also AT&T Nov. 22 Ex Parte at 2.

for a time and is then overtaken by a new standard.⁴⁵⁴ We see no evidence at this time, however, of such a new breakthrough technology strong enough to overtake AOL's NPD. AOL has pointed us to no such evidence. On the contrary, the evidence indicates that NPD technology is the best protocol for providing address and presence information for interactive services.

168. *AOL's Resistance to Interoperability.* AOL has consistently resisted interoperability of IM services. In 1999, various non-AOL IM providers repeatedly attempted to gain access to AOL's proprietary and/or AIM NPD in order to interoperate with AOL, and were blocked by AOL.⁴⁵⁵

169. AOL has stated that it will seek interoperability, but has participated little in industry consultations aimed at industry-wide interoperability.⁴⁵⁶ According to several observers, AOL has dragged its feet in these consultations.⁴⁵⁷ Objective evidence supports this view.⁴⁵⁸ The body through which the consultations were occurring, the Internet Engineering Task Force (IETF), found that AOL's

⁴⁵⁴ See, e.g., Stan J. Liebowitz and Stephen E. Margolis, *WINNERS, LOSERS AND MICROSOFT* at 10-11, 137 (1999).

⁴⁵⁵ iCast Comments at 1; Disney July 25 Ex Parte at 27-28; Aaron Pressman, *Microsoft Messenger Finds Its Voice* at 2, *THE STANDARD*, July 20, 2000, at <http://thestandard.com/article/display/0,1151,16984,00.html?nl+dnt> (visited July 21, 2000). We know of no attempt to gain access to AOL's NPD for ICQ.

⁴⁵⁶ See IMUnified, *Mission Statement*, at <http://www.imunified.org/> (visited Aug. 11, 2000), concerning IMUnified, a recently formed coalition of technology and instant messaging companies. They plan to make each others' services interoperable and "will strive to implement open standards-based interoperability for instant messaging as these protocols emerge from the IETF standardization process." Founding members include AT&T, Excite@Home, iCast, Microsoft, Odigo, Tribal Voice and Yahoo!. They announced in late July that "we will publish specifications that will enable functional interoperability among IMUnified members' instant messaging services and that we will implement during the fall timeframe." IMUnified, *Roundtable Q&A: Industry Leaders Discuss Goals of New IMUnified Coalition*, at <http://www.microsoft.com/presspass/features/2000/jul00/07-25imUnified.asp> (visited Aug. 11, 2000). See also Ariana Eunjung Cha, *AOL Unmoved in Software Dispute*, *WASH. POST*, Aug. 24, 2000, at A-1, -14; Jim Lynch, *Instant Messaging Roundup*, *MSNBC Technology*, Aug. 18, 2000, at <http://www.msnbc.com/news/447786.asp> (visited Aug. 28, 2000).

⁴⁵⁷ iCast Comments at 5, 10; Letter from Ross Bagully, President and CEO, Tribal Voice, to Magalie Roman Salas, Secretary, FCC, dated Aug. 8, 2000, at 1-2 ("Tribal Voice Aug. 8 Ex Parte"); Industry White Paper on AOL's Submissions to the IETF & the FCC ("Second IM White Paper") at 11 n.19, 14, Attachment to Letter from Ross Bagully, President and CEO, Tribal Voice, to Magalie Roman Salas, Secretary, FCC, dated July 21, 2000 ("Tribal Voice July 21 Ex Parte"). Several observers appear to find AOL's original participation in IETF less than enthusiastic. Carolyn Duffy Marsan, *AOL Out of Instant Messaging Standard Bake-Off*, *Network World Fusion News*, Aug. 7, 2000, at <http://www.newfusion.com/cgi-bin/mailto/x.cgi> (visited Aug. 15, 2000); *Network World*, *Front News Briefs*, *AOL Touts Instant Messaging Standard*, *NETWORK WORLD*, June 19, 2000, at 2000 WL 9435687 ("After a year of dragging its feet on instant messaging interoperability, AOL . . ."); Lawrence J. Magid, *Instant Messaging Users Victims as Giants Do Battle*, *LOS ANGELES TIMES*, Aug. 23, 1999, at C-1, at 1999 WL 2189129 ("IETF has yet to receive AOL's instant messaging protocols, said Vijay Saraswat, co-chair of the IETF's Instant Messaging and Presence Protocol committee. 'In terms of moving the whole process forward, it would be significantly helpful to have AOL's protocols published, but different companies choose to participate in different ways,' Saraswat said"); Charles Cooper, *The Messaging Muddle: End the Bickering*, *ZDNET NEWS*, AUG. 4, 1999, at 1999 WL 14537884 ("The IETF, which has been working towards hashing out a consensus on messaging protocols, received encouraging news last week when AOL said it would participate in a working group charged with drafting the outlines of a universal messaging protocol. . . . AOL could accelerate the process by next publishing its existing Instant Messaging protocols. That suggestion has so far gone nowhere, . . .").

⁴⁵⁸ Between August 1999 and October 2000, industry members exchanged thousands of electronic mails about IM interoperability through the IETF. Only eight were by AOL. Heffernan House Testimony at 5, Attachment to iCast Oct. 10 Ex Parte.

proposal lacked specificity, and began pursuing several other proposals.⁴⁵⁹ Recently, the IETF suspended its efforts, stating that no consensus about how to effect interoperability could be reached.⁴⁶⁰ At the en banc hearing in this proceeding, AOL opined that interoperability could only be achieved after lengthy industry deliberations and has stated that a technical standard could be achieved by July 2001, after which testing would begin.⁴⁶¹ As noted below, we will require AOL to file a progress report with the Commission every 180 days with regard to the actions it has taken towards interoperability.

170. AOL claims that it has been stymied in its attempts to provide interoperability by its desire to protect the privacy and security of its customers.⁴⁶² Other IM providers allege that they already have security and privacy procedures that are at least as great as AOL's.⁴⁶³ We find AOL's claim unconvincing. AOL has given us no details about its concerns, or how it currently protects its users. While it may be that AOL desires eventually to create an interoperable product that protects subscribers' privacy and security, privacy and security are matters that can be negotiated and resolved promptly, not pretexts for delaying interoperability unnecessarily.⁴⁶⁴ Microsoft and Yahoo! express no such disabling anxieties about privacy and security, even though they, like AOL, have reputations, goodwill, and customer bases to protect, and the technical expertise to distinguish serious and real problems from imaginary and minor ones. Microsoft and Yahoo!, not to mention many other IM providers, have as much incentive as AOL to implement interoperability with adequate protections for users' privacy and security. Security concerns do not appear to be the only reason that AOL has resisted interoperability.

171. *AOL's Use of Backward Compatibility.* AOL's new IM-based services in AIM 4.1 include a Talk Feature. In introducing AIM 4.1, AOL is taking advantage of backward compatibility by

⁴⁵⁹ See also Carolyn Duffy Marsan, *AOL Out of Instant Messaging Standard Bake-Off*, Network World Fusion News, Aug. 7, 2000, at <http://www.newfusion.com/cgi-bin/mailto/x.cgi> (visited Aug. 15, 2000) ("AOL's last-minute submission was a general framework for instant messaging interoperability rather than a full-fledged protocol, so it was not chosen for further consideration.").

⁴⁶⁰ Dennis Fisher, *A New Tack for IM Protocol*, EWEEK FROM ZDWIRE, Oct. 22, 2000, at 2000 WL 18179376. It is largely for this reason that we choose a remedy other than the ones, emphasizing industry standard setting through the IETF, advocated by IMUnified and its members. See, e.g., Microsoft Nov. 20 Ex Parte at 2.

⁴⁶¹ FCC En Banc Hearing, CS Docket No. 00-30 (July 27, 2000), Tr. at 167-68: Chairman Kennard: "... You've said that you want [interoperability] to happen and that you can do it. Could you tell us for the record when it will get done?" Mr. Schuler: "Well, we can tell you for the record that there are two pieces to the puzzle. One piece of the puzzle is building the technology that will allow our servers to interoperate with other services and incorporate all the controls that allow us to protect our consumers. We think that's about a 12-month job. ..." Chairman Kennard: "Twelve months from today." Mr. Schuler: "We are working at it right now. But there's another issue --" Chairman Kennard: "Is that a yes?" Mr. Schuler: Well, yes. Twelve months from today." Chairman Kennard: "Twelve months from today." Mr. Schuler: "But let me clarify. That's 12 months to do the technology. There is another issue that's important, ... the hackers and spammers are out there figuring out how to break it. ... [T]here has to be a period of quality assurance, a period of us testing the system and assuring that ... you've built the most unbreakable system possible." We do not necessarily agree with AOL that achieving interoperability will require such a lengthy time. See also Confidential Appendix IV-B-2, Note 5; Tribal Voice Aug. 8 Ex Parte at 1-2.

⁴⁶² Compare Case En Banc Testimony, Tr. at 29-30, and Schuler En Banc Testimony, Tr. at 164-65, with Bagully En Banc Testimony, Tr. at 154. See also AOL Sept. 19 Ex Parte at 4; American Online, Inc., *Open IM Architecture Design*, at <http://aim.aol.com/openim>, visited June 19, 2000 ("[W]e have resisted efforts by our competitors to impose a 'quick fix' system that would jeopardize our members' privacy and security.").

⁴⁶³ iCast July 25 Ex Parte, Attachment at 11-13.

⁴⁶⁴ See Tribal Voice July 21 Ex Parte, Attachment (Second IM White Paper) at 7-11.

making its new features compatible with its IM service.⁴⁶⁵ AOL does this by using the same NPD, the one it originally built for IM, for these new features. In this way, a user of AIM 4.1 who has high-speed Internet access service is not only able to engage in AIHS exchanges with other users of AIM 4.1, but is also able to continue to engage in IM with the much larger body of AOL's IM users who continue to use narrowband Internet access service. AOL is also using its base of IM users as a springboard for launching its AIHS. Recently, in introducing AOL Instant Messenger 4.3, AOL's web page warns that "[i]n order to take advantage of some of the newest AIM features, both you and your buddies must upgrade to AIM 4.3. . . . If your buddy's software is older, they may not be able to talk, share files, or take advantage of other new features. Send an instant message to your buddies today to let them know about AIM 4.3."⁴⁶⁶

172. We find it likely that AOL will, when presented with other, similar opportunities, continue to take advantage of backward compatibility as it rolls out new AIHS. Users of its new high-speed services will be able to use AOL's IM to communicate with its existing customer base. In addition, narrowband IM users may be able to adopt these new high-speed services, which will enable them to communicate with their users, albeit with relatively low quality. The Talk Feature of AIM 4.1 is a good example of such a feature. It can be used by narrowband customers, but quality is higher for high-speed customers. This difference will be more evident for features that require yet more bandwidth, such as videoconferencing.

173. Backward compatibility will have at least two benefits for AOL. First, it will enable it to offer new services tailored to high-speed customers without losing the network effects of the NPD that it developed in narrowband IM services. That is, AOL will be able to take the value inherent in its IM NPD and leverage it into its new AIHS. For example, users of AOL's AIHS will, because of the availability of AOL's NPD, be able to send streaming video messages to more other users, and will be able to receive them from more other users, than users of any other AIHS. AOL users will be able to video chat with more buddies, will be able to go web surfing via streaming video with more other users, will be able to hold larger business meetings with documents displayed via streaming video, and will be more likely to quickly compose large groups for these and other uses of streaming video.

174. Second, the benefits of providing backward compatible AIHS may lead other actual or potential providers of competitive but incompatible AIHS to conclude that it will be difficult, if not impossible, to successfully compete with AOL for customers.⁴⁶⁷ Thus, AOL's user base and NPD in IM gives it a unique first mover advantage into AIHS. We find that, with the advantages that backward compatibility will give it, AOL will be more able to dominate AIHS, or may be likely to dominate AIHS, not necessarily on the merits of its service, but because of the network effects inherited and leveraged from the NPD it built up in the IM business.

175. *Anticompetitive Effects of the Proposed Merger.* As already discussed, AOL is by far the largest IM provider, by virtue of its uniquely large NPD, and therefore has a strong incentive to resist and delay interoperating with other IM providers' NPDs. Without interoperability, users may choose AOL's

⁴⁶⁵ See Bernstein and McKinsey -- Broadband! at 24 ("... AOL counts fully half of the current online subscribers as its customers, giving it the opportunity to shift many customers from slow- to high-speed service. ").

⁴⁶⁶ America Online, Inc., *AOL Instant Messenger 4.3*, at <http://www.aol.com/aim40/html> (visited Nov. 17, 2000). Slightly earlier, in announcing its AIM 4.1, AOL encouraged users to "[s]end an instant message to your buddies today to let them know about AIM 4.1!" America Online, Inc., *AOL Instant Messenger 4.1*, at <http://www.aol.com/aim/aim40.html> (visited Oct. 11, 2000).

⁴⁶⁷ See AT&T Nov. 22 Ex Parte at 2-3.

IM simply because it has the largest NPD and not because it offers the best value or is most attractive for some other meritorious reason. This puts a damper on competition and innovation, whether or not the network effects are so strong that they cannot likely be overcome (e.g., by a highly superior product offered by a competitor). AOL is in fact strongly resisting interoperability, thus taking advantage of the network effects of its NPD in competing with other providers. As a consequence, all consumers and the public interest are being disserved. Actual and potential competition among IM providers is hampered.

176. We conclude that AOL, through the proposed merger, will gain control over many significant assets owned by Time Warner and that these assets will make AOL Time Warner more able or more likely to dominate AIHS than it would otherwise be.⁴⁶⁸ AOL Time Warner may well be in a position of unassailable dominance in AIHS as a result of the proposed merger.

177. One, but by no means the only, relevant asset is the cable television systems owned by Time Warner. These systems are now being used to provide high-speed Internet access. A second asset that AOL will acquire in the proposed merger is Time Warner's contractual relations with the approximately 13 million cable television households in this country that those systems serve.⁴⁶⁹

178. A third relevant Time Warner asset is Road Runner, a major high-speed ISP, and a fourth is Road Runner's contractual relations with its subscriber base, which recently passed 1.1 million.⁴⁷⁰ Road Runner is now the exclusive high-speed ISP on Time Warner cable systems.⁴⁷¹ In addition, approximately 40 percent of Road Runner's customers are on cable television systems other than Time Warner's that have agreed to make Road Runner their exclusive high-speed ISP through 2001.⁴⁷² These latter cable television systems serve more than five million households.⁴⁷³ Thus, by acquiring Time Warner, AOL has gained access to nearly 20 million households who are or will be enabled for residential high-speed Internet access and to whom AOL Time Warner may now market AIHS.⁴⁷⁴ Road Runner

⁴⁶⁸ We do not here challenge how AOL achieved its dominance of IM service, or its deployment of AIHS as stand-alone services. Indeed, we have engaged in numerous proceedings to encourage the deployment of new and innovative services to all Americans, and we welcome the introduction of AIHS and any increased demand for high-speed services and connections that may result from the introduction of AIHS.

⁴⁶⁹ *Time Warner Cable Joins PowerUP to Provide High Speed Access to Bridge the Digital Divide: New Partnership Helps Underserved Youth Succeed in the Digital Age*, BUSINESS WIRE, Oct. 19, 2000.

⁴⁷⁰ Road Runner Corp., *Road Runner Sets Record Third Quarter* (press release), Oct. 16, 2000.

⁴⁷¹ Time Warner has announced that this exclusivity will end in April 2001. AT&T Corp., *Road Runner Joint Venture To Be Dissolved* (press release), Dec. 18, 2000. See also Time Warner Inc., *Time Warner To Increase Road Runner Ownership and Manage Its Operations* (press release), Dec. 18, 2000.

⁴⁷² See, e.g., Rebecca Cantwell, *DOJ Waves Road Runner Away From AT&T*, INTERACTIVE WEEK FROM ZDWIRE, June 5, 2000, at 2000 WL 4066715 (Road Runner is exclusive high-speed provider to Media One).

⁴⁷³ Recently, MediaOne alone was estimated to have 5 million cable service customers. Kelly Pate, *CSG Systems Stock Dives Amid Dispute with AT&T*, DENVER POST, Sept. 29, 2000, at 2000 WL 25829548.

⁴⁷⁴ *Road Runner Goal One Million*, TELEVISION DIGEST, March 13, 2000, at 2000 WL 8644906 (in March 2000, new Road Runner President's "plan calls for offering Road Runner to at least another 10 million cable homes this year, which would make it available in more than 25 million homes, over 80% of combined Time Warner-MediaOne universe.").

does not now include an IM service in its home page offering, but it is reasonable to expect it to have one and for that to be AOL's NPD.⁴⁷⁵

179. AOL will also acquire other relevant Time Warner assets, such as the significant content owned by Time Warner. This includes the stories and photographs in Time Warner's magazines, such as Time and Sports Illustrated; the news, sports programs and other information in video form available through CNN; and its extensive library of movies, television shows, popular music, and animated entertainment. This content will be useful to certain of AOL's new AIHS, in particular sending individual users television-based news stories on pre-selected subjects and allowing users to send each other Time Warner-owned animation, movie and television excerpts, and music. The video assets in particular are well suited for AIHS. AOL's ownership of Time Warner will allow it to make this mass of content available quickly to users of AOL's AIHS.⁴⁷⁶ This content will have already been created, so the cost of providing a copy of it (e.g., a video clip from CNN or a story from Time Magazine) to AOL will be, as a practical matter, zero. The savings resulting from this kind of vertical merger will thus be increased beyond their normal levels.⁴⁷⁷

180. The combination of these assets will likely give AOL Time Warner another first mover advantage in AIHS.⁴⁷⁸ In contrast, other AIHS providers, if they have any access to Time Warner's systems, services, and content, will need to negotiate individual contracts for that access and will have to pay for it. They will need negotiations with, and payments to, other content owners, also, to bring comparable AIHS to their users. Given the size and scope of Time Warner's assets, many contracts and much time would be needed to make an equivalent AIHS offering.

181. In sum, although Time Warner's valuable content, conduits, prominent high-speed ISP, and ready-made customer base will enable the merged firm to provide more services to AOL's IM customers, this combination will also make it much easier for AOL Time Warner to leverage the network effects of AOL's NPD into AIHS. The Applicants appear to be pointing to this very phenomenon as a benefit of their proposed merger when they state that they "plan to create and deliver to consumers easily

⁴⁷⁵ See Confidential Appendix IV-B-2, Note 6. The FTC's Order to Hold Separate will prevent such an offering until AOL Time Warner offers an unaffiliated ISP on each of its cable systems. *Order To Hold Separate*.

To the extent that the almost twenty million Time Warner and Road Runner households already subscribe to one of AOL's narrowband IM services, the backward compatibility of AOL Time Warner's AIHS can make the latter services' attractions apparent sooner than they otherwise would be.

⁴⁷⁶ AT&T Nov. 22 Ex Parte at 2.

⁴⁷⁷ See Letter from Dr. Frederick R. Warren-Boulton, Microeconomic Consulting and Research Assocs., Inc., consultant for AT&T, to Magalie Roman Salas, Secretary, FCC, dated Dec. 5, 2000, at 2. See also Michael H. Riordan and Steven C. Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach*, 63 ANTITRUST L.J. 513, 526-27 (1995) ("Eliminating Double Markup of Costs. When both the input and output markets are imperfectly competitive, output prices are increased above the competitive level and possibly even above the monopoly level, as marginal input costs are marked up twice, once by the input supplier and once by the output producer. Under these circumstances, when the integrated firm can efficiently supply inputs to itself, a vertical merger of a firm with a supplier of a variable input can reduce output prices by eliminating one of the two markups.").

⁴⁷⁸ AOL Time Warner's first mover advantage will make more difficult the task facing deployers of any new "breakthrough technology."

accessible interactive services – mixing and fusing content and communication elements – that today are only in their infancy or are not yet on the drawing board.”⁴⁷⁹

182. The proposed merger will also give AOL the opportunity and incentive to impair the performance of its rivals’ AIHS. Other AIHS providers will provide their services over Time Warner cable systems and Road Runner. The proposed merger will put AOL in control of those assets. The merger will thus give AOL the opportunity to control the quality of service that its competitors receive.⁴⁸⁰ For example, AOL Time Warner will be able to make its own users’ video conferencing transmissions quick and clear and those of competitors slow and choppy.⁴⁸¹ AOL Time Warner will have the incentive to engage in such conduct because it will discourage consumers from using competitors’ AIHS and will draw them instead to AOL Time Warner’s.⁴⁸² Such conduct would be particularly destructive to competition in AIHS because, as we have noted, QoS will be especially important in those services.

183. There is precedent for such misconduct. Companies in communications markets have been known to acquire scarce facilities that their competitors need and to deny the competitors equal or reasonable access to those facilities, and thus to give themselves anticompetitive advantages or monopolies.⁴⁸³ AOL in particular has a history of denying its IM competitors *any* access to its NPD.

184. We find the situation in AIHS different from that which, in our ruling on the merger of AT&T and Media One, led us to conclude that concern for the future of competition in various broadband services would be premature and that it would be prudent to refrain from action.⁴⁸⁴ There, we addressed

⁴⁷⁹ Applicant’s Second Response at 17.

⁴⁸⁰ The existence of high-speed services that compete with cable-based high-speed services, such as xDSL, may not dissuade AOL from such conduct in IM. AOL’s present position in IM and its likely dominance of AIHS derive in large part from its NPD and will be felt on all high-speed “last miles.” xDSL and other high-speed alternatives to cable will not discipline, and may even extend, the anticompetitive potential of AOL’s NPD.

⁴⁸¹ A promotional paper by Cisco Systems states that, with its network equipment, “[s]ervice providers can ‘up the ante’ by giving customers guaranteed and differentiated services through IP-based QoS product.” Cisco Systems, *White Paper: Cisco’s Packet over SONET/SDH (POS) Technology Support; Mission Accomplished* at 4, at http://www.cisco.com/warp/public/cc/pd/rt/12000/tech/posdh_wp.htm (visited Oct. 10, 2000).

⁴⁸² Because we expect the basic technology of AOL’s new IM-based services to be similar to others’, AOL Time Warner will likely have more of an incentive to discriminate against the latter than it would if their services were sharply differentiated and if each appealed to different customers. In the latter event, AOL Time Warner’s incentive would more likely be to make all the differentiated services function well. See Confidential Appendix IV-B-2, Note 7.

⁴⁸³ See generally *United States v. AT&T*, 524 F. Supp. 1336 (D.D.C. 1981) (detailing the discrimination of the Bell System local telephone companies against its competitors in terminal equipment, long distance, and other products and services for which access to local lines was necessary). Similar concerns also underlie the provisions concerning “program access” by cable television companies (Communications Act § 628, 47 U.S.C. § 548) and Bell re-entry into interexchange service (Communications Act §§ 271-72, 47 U.S.C. §§271-72). See also James W. Olson and Lawrence J. Spiwak, *Can Short-Term Limits on Strategic Vertical Restraints Improve Long-Term Cable Industry Market Performance?*, 13 CARDOZO ARTS & ENT. L.J. 283 (1995).

⁴⁸⁴ *AT&T-MediaOne Order*, 15 FCC Rcd at 9871 ¶ 123 (“Given the nascent condition of the broadband industry and the foregoing promises of competition, we find it premature to conclude that the proposed merger poses a sufficient threat to competition and diversity in the provision of broadband Internet services, content, applications, or architecture to justify denial of the merger or the imposition of conditions to supplement the Justice Department’s proposed consent decree.”).

the entire residential high-speed Internet access business. Here, our attention has been sharply focused on AIHS, the NPD assets at its core, and the particular abilities and incentives in AIHS of the two specific parties to this proposed merger. Seeing a foreseeable and likely danger to competition in AIHS, we can act promptly and with confidence. This danger leads us to protect the possible emergence of a competitive market and not to wait for more traditional antitrust remedies, which may not be used until harm is done and may take years to undo.

185. With a dominant position in the AIHS business, AOL Time Warner would be likely to charge higher prices than it otherwise would to end users, content providers, and/or advertisers.⁴⁸⁵ AOL's domination may also result in less innovation in new IM-based services, and AIHS in particular, than there otherwise would be. We find such harm both more likely as a result of the proposed merger than it would otherwise be, and contrary to the public interest. Accordingly, we find that the proposed merger will significantly enhance AOL Time Warner's ability and incentive to leverage the network effects of AOL's NPD, from its IM service, into new IM-based services including AIHS, thereby making it more able or likely to dominate those services and to effectively foreclose the emergence of a competitive market. We see no benefits from AOL Time Warner's domination that will outweigh these harms.

186. AOL implies that we should address these issues in a rulemaking that would apply to all providers of IM and new IM-based services.⁴⁸⁶ The concerns we have described above flow, specifically and exclusively, from AOL's role, and not from any other company's, in services that depend on an NPD after the proposed merger. Further, our concerns are time-sensitive, focusing as they do on current events in the emerging business of new interactive services. By the time a rulemaking ended, the domination by AOL Time Warner that we today find likely might well have been achieved and be beyond correction by marketplace forces. Regulation of AOL Time Warner's offerings might be necessary. Too often in the history of communications, interoperation has required detailed government mandate and decades of supervision,⁴⁸⁷ and dominant firms' entry into new markets has required case-by-case permission after

⁴⁸⁵ See, e.g., Heffernan House Testimony at 3 ("By declining to allow IM interoperability and allowing rival interactive TV providers to use AOL IM only upon payment of substantial license fees (or not licensed at all), AOL would substantially raise rival interactive TV providers' costs."), Attachment to iCast Oct. 10 Ex Parte.

⁴⁸⁶ See AOL Sept. 19 Ex Parte at 5.

⁴⁸⁷ See, e.g., AT&T Corp., *Annual Report for the Year Ending Dec. 31, 1913*, at 24-26 (1914) (the "Kingsbury Commitment," in which AT&T committed to interconnect its long distance lines with independent telephone companies under certain conditions), cited in Milton Mueller, Jr., *UNIVERSAL SERVICE: COMPETITION, INTERCONNECTION, AND MONOPOLY IN THE MAKING OF THE AMERICAN TELEPHONE SYSTEM* at 130 n.1 (1997); *Bell System Tariff Offerings of Local Distribution Facilities for Use by Other Common Carriers*; and *Letter of Chief, Common Carrier Bureau, Dated October 19, 1973, to Laurence E. Harris, Vice President, MCI Telecommunications Corp.*, Docket No. 19896, Decision, 46 FCC2d 413 (1974), affirmed, *Bell Tel. Co. v. FCC*, 503 F.2d 1250 (3rd Cir. 1974), cert. denied, 422 U.S. 1026 (1975) (regulating interconnection between dominant carriers and new entrant private line carriers); *United States v. AT&T*, 552 F. Supp. 131, 227 (D.D.C. 1982), affirmed, 460 U.S. 1001 (1983) (requiring Bell local companies to offer long distance carriers other than AT&T interconnection equal to that offered to AT&T); *Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket Nos. 94-54 and 95-185, Notice of Proposed Rulemaking, 11 FCC Rcd 5020 (1996) (one of many proceedings regulating interconnection of dominant wireline carriers and relatively small mobile wireless carriers); Communications Act § 251, 47 U.S.C. § 251 (detailed regulation of interconnection between dominant incumbent local exchange carriers and new entrant competitive local exchange carriers).

intense scrutiny.⁴⁸⁸ We assiduously seek to avoid those outcomes here, and we earnestly hope that our light-handed, market-opening condition will lead to interoperability without further government action.

187. *Interoperability.* We find that the anticompetitive dangers discussed above would be mitigated if there were interoperability between AOL's new IM-based services and those of other companies. This would permit a user of an AOL service and a user of another service to talk, play games, engage in video conferencing, *etc.*, with each other as easily as each exchanges instant text messages today with other users of the service to which he or she subscribes. If there were interoperability of new IM-based services, AOL would be less able to leverage its leading position in IM services into those new services.

188. To prevent AOL Time Warner, as a result of the proposed merger, from becoming more able or likely to dominate AIHS, we impose a prophylactic condition. Because the domination that concerns us would be made likely by the combination of AOL's and Time Warner's assets, we reject AOL's argument that its dispute with other IM providers about interoperability preceded and is therefore immaterial to the proposed merger.⁴⁸⁹ We have also considered carefully AOL's other cautions against intervention in the market, but we find them unconvincing. AIHS are novel services, but we and many others believe that they will be significant in the near future. If they are not, our intervention will cause little, if any, harm to consumers or efficiency. If, as AOL predicts, Microsoft and Yahoo! effectively challenge AOL in IM and/or AOL Time Warner in AIHS, then AOL will have an incentive to achieve interoperability and our condition will not come into operation. The risk of our not intervening now, however, is to risk the emergence of a significant new business needing regulation, a result we and Congress wish to avoid especially on the Internet and interactive services. For the reasons stated above, we cannot be certain that new entry, even by the likes of Microsoft and Yahoo!, will discipline AOL Time Warner in AIHS. Finally, we are not convinced that AOL's expressions of concern with security and privacy justify giving free rein to its resistance to interoperability.

189. Accordingly, we are imposing a condition that is precisely and narrowly aimed at preventing the specific harm that the proposed merger will cause. It is also directed at serving the broader public interest in encouraging entry, competition, innovation, the broader deployment of new services, the lowest possible transaction costs for consumers, and necessary protection of persons with disabilities. Our condition is balanced because it contains ways for AOL to show that, due to events we do not anticipate, the condition is no longer necessary. Our condition gives AOL incentives that it does not now have to interoperate and thus to benefit consumers, efficiency and the public interest. Our condition also gives other IM and AIHS providers incentives to enter and remain in the business that they do not now have.

190. As set forth below, our condition gives AOL an incentive to interoperate by forbidding it from providing streaming video AIHS applications until it interoperates. Our condition focuses on streaming video AIHS applications, for several reasons. First, AOL is not offering them as part of its IM today. Second, as we define them below, we believe that the scope of video AIHS applications is relatively clear. If our condition focused on AIHS applications that included "talking" or "game-playing,"

⁴⁸⁸ Examples are wireline telephone companies' entry into cellular service (*see, e.g.,* Rogers Radio Commun. Serv., Inc. v. FCC, 593 F.2d 1225 (D.C.Cir. 1978); MCI Cellular Tel. Co. v. FCC, 738 F.2d 1322 (D.C. Cir. 1984)) and enhanced services (*see, e.g.,* California v. FCC, 905 F.2d 1217 (9th Cir. 1990), 39 F.3d 919 (9th Cir. 1994), *cert. denied*, 514 U.S. 1090 (1995); and Bell incumbent local exchange carrier entry into in-region interexchange service (47 U.S.C. §§ 271-72).

⁴⁸⁹ Applicants' Reply Comments at 47-49.

which AOL appears to be providing now to some extent, there might be difficulty in detecting when AOL had made an advancement with these services. Third, AOL will be able to provide streaming video AIHS applications for the first time on the facilities of Time Warner that are coming under AOL's control as a result of the proposed merger. We believe that it is in these applications that AOL would be positioned to gain the greatest anti-competitive advantage as a result of the proposed merger, by combining its NPD with the assets of Time Warner.

3. Condition

191. AOL Time Warner's likely domination of the potentially competitive business of new, IM-based services, especially AIHS applications such as videoconferencing, requires that we impose a condition to prevent that merger-specific harm.⁴⁹⁰ AOL Time Warner may not offer an AIHS application that includes the transmission and reception, utilizing an NPD over the Internet Protocol path of AOL Time Warner broadband facilities, of one- or two-way streaming video communication using NPD protocols – including live images or tape – that are new features, functions, and enhancements beyond those offered in current offerings such as AIM 4.3 or ICQ 2000b,⁴⁹¹ unless and until AOL Time Warner has successfully demonstrated it has complied with one of the following grounds for relief.

192. *Grounds for Relief. Option One.* AOL Time Warner may file a petition demonstrating that it has implemented⁴⁹² a standard for server-to-server interoperability of NPD-based services⁴⁹³ that has been promulgated by the IETF or a widely recognized standard-setting body that is recognized as complying with National Institute of Standards and Technology or International Organization for Standardization requirements for a standard setting body. At a minimum, AOL Time Warner must demonstrate that the adopted protocol makes available to another provider of NPD-based services such data in AOL Time Warner's NPD(s) as will enable the other provider's users to know the addresses of AOL Time Warner users and detect their presence online, to the same extent that AOL Time Warner's users know each others' addresses and detect each others' presence online. AOL Time Warner must also demonstrate that the protocol makes available to other IM providers any other information used by AOL Time Warner to implement and process transactions of AIHS services, to the extent allowed by law.⁴⁹⁴ The adopted standard shall also ensure that AOL Time Warner shall afford the same quality and speed in processing transactions to and from the other provider as it affords to its own transactions of the same type.⁴⁹⁵ Other than specifying server-to-server interoperability as described above, we do not set any technical criteria for interoperability.

⁴⁹⁰ In "AOL Time Warner," we include the separate pre-merger companies and the post-merger company.

⁴⁹¹ We explicitly exclude upgrades to AOL's current IM products that are not otherwise included in AIHS. We do not intend to include within AIHS streaming video communications not utilizing NPD protocols or applications that contain or are packaged with current IM.

⁴⁹² By "implemented," we mean both the creation and deployment of the interoperable application.

⁴⁹³ "Server to server" interoperability is interoperability in which a client interacts with other NPD-based services through its own server. Each server establishes communication with other servers, including those controlled by other providers of NPD-based services, to exchange presence information and names.

⁴⁹⁴ The other provider must afford the same capabilities to AOL.

⁴⁹⁵ We do not require the AOL Time Warner software to read and interpret all the data it receives or to make that data comprehensible to its users.

193. *Option Two.* AOL may file a petition demonstrating that it has entered into written contracts providing for server-to-server interoperability with significant, unaffiliated, actual or potential competing providers of NPD-based services offered to the public.⁴⁹⁶ AOL must execute the first such contract prior to offering the video AIHS service described above. After AOL Time Warner executes the first contract, an officer of AOL Time Warner shall certify to the Commission that it is prepared to promptly negotiate in good faith, with any other requesting provider of NPD-based services.⁴⁹⁷

194. Within 180 days of executing the first contract, AOL must demonstrate that it has entered into two additional contracts with significant, unaffiliated, actual or potential competing providers. The interoperability achieved under these contracts shall be identical to that described under Option One above with identical terms and conditions for technical interoperability. All parties to a contract shall agree not to alter the technical protocol without the consent of all parties providing interoperable IM services under these agreements. The contracts may contain different provisions for business considerations. AOL Time Warner must submit copies of these agreements for server-to-server interoperability into the record of this proceeding within 10 days of execution of such agreement. AOL Time Warner may redact any proprietary information or terms not related to technical interoperability.

195. *Option Three.* AOL Time Warner may seek relief from the condition on offering AIHS video services by filing a petition demonstrating that imposition of the condition no longer serves the public interest, convenience and necessity because there has been a material change in circumstance, including new evidence that renders the condition on offering AIHS video services no longer necessary in the public interest, convenience, and necessity. If AOL Time Warner proffers market share information as evidence that the condition no longer is necessary in the public interest, convenience, and necessity, AOL Time Warner must demonstrate that it has not been a dominant provider of NPD services for at least four (4) consecutive months.

⁴⁹⁶ A potential competitor is "an aggressive, well equipped and well financed company that is engaged in the same or related lines of commerce." *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 532 (1973). See also *United States v. Penn-Olin Chem. Co.*, 378 U.S. 158, 174 (1964). In this case, we expect that the potential provider would be a company that is capable of entering into an arms-length, commercially reasonable and mutually beneficial contract with AOL and is likely to become a significant competitor in the near term in providing NPD services.

⁴⁹⁷ By "negotiate in good faith," we mean that AOL Time Warner: (1) may not refuse to negotiate with another IM provider regarding interoperability; (2) must appoint a negotiating representative with authority to bargain and conclude an agreement on interoperability; (3) must agree to meet at reasonable times and locations and may not act in a manner that would unduly delay the course of negotiations; (4) may not put forth a single, unilateral proposal that is not subject to negotiation; (5) in responding to an offer proposed by another IM provider, must provide considered reasons for rejecting any aspects of the other provider's offer or proposal; (6) may not enter into an agreement that requires the other IM provider to interoperate exclusively with AOL Time Warner or authorizes AOL Time Warner to deny interoperability to any other IM provider; and (7) must agree to execute a written agreement that sets forth the full agreement between AOL Time Warner and the other IM provider. We add the seventh requirement to ensure that there are no misunderstandings as to the obligations of the parties to the agreement. In addition, because good faith determinations must be grounded on particular facts, we will also examine whether, based on the totality of the circumstances, AOL Time Warner has bargained in good faith. If we find that AOL Time Warner has not bargained in good faith, we will instruct AOL Time Warner to restart negotiations with the aggrieved IM provider, but will not mandate that the parties reach agreement or enter into a contract on specific terms or conditions. Cf. *Implementation of the Satellite Home Viewer Improvement Act of 1999, Retransmission Consent Issues: Good Faith Negotiation and Exclusivity*, CS Docket No. 99-363, First Report and Order, 15 FCC Rcd 5445 (2000).

196. *Procedure for Submission of Petition to the Commission.* To receive authorization to offer AIHS video services pursuant to Options One through Three above, AOL Time Warner shall submit a Petition to the Commission. The Petition shall be filed with the Secretary's office and shall contain the factual and legal bases demonstrating satisfaction of one of the three options set forth above. The Commission shall put the Petition out for Notice and Comment with a maximum of 30 days for receipt of such comments. Petitioner may submit a reply not more than 15 days after the closure of the comment period. Upon the timely filing of Petitioner's reply, the Petition, comments and reply shall be submitted to the Commission for disposition. The Commission shall issue its findings and conclusions not more than 60 days after receipt of the matter. This timeline may be altered at the discretion of the Commission upon a timely submitted request of the Petitioner. The findings of the Commission shall be made upon clear and convincing evidence, and in the absence of such an evidentiary showing, the condition shall not be eliminated.

197. *Reporting Requirement.* We also require that AOL Time Warner file a progress report with the Commission, 180 days after the release of this *Order* and every 180 days thereafter, describing in technical depth, the actions it has taken to achieve interoperability of its IM offerings⁴⁹⁸ and others' IM offerings. Such reports will be placed on public notice for comment. Any confidential or proprietary information contained in the reports may be submitted to the Commission pursuant to the terms of the protective order in this proceeding.

198. *Enforcement.* The Commission shall retain jurisdiction over the licensees or their successors for the purpose of enforcing the terms of this condition, for a period not to exceed five years. The terms of this condition shall be enforced pursuant to the Commission's powers under the Communication Act. Any party to the *Order*, or their successor in interest, may petition this Commission at any time for relief from the condition on offering AIHS video services imposed pursuant to this *Order*.

199. In the event that any person wishes to bring to us a dispute about AOL's compliance with our condition, we shall require that the following procedures be followed. These procedures are designed to resolve any disputes within sixty (60) days of the first filing. Within twenty (20) days after public notice is given of either the filing of a complaint or a showing by AOL Time Warner, any interested party shall file a response (AOL Time Warner's answer to the complaint, another person's response to AOL Time Warner's alleged showing). Within ten (10) days after the filing of the responses, the party that made the first filing may file its reply.⁴⁹⁹ The complainant and AOL Time Warner shall each, with its first filing, furnish a detailed report, technical or otherwise, describing the conduct or events that are the subject of the filing. All these filings shall be made with the Commission Secretary and shall be concurrently served on the Chief, Cable Services Bureau.⁵⁰⁰ The complaint or showing, as the case may be, shall be dismissed or sustained within sixty (60) days of its filing.

200. *Sunset.* Five (5) years after the date of release of this *Order*, the condition set forth in the preceding paragraphs shall expire and shall not restrain AOL Time Warner from offering video AIHS.

⁴⁹⁸ Within "its IM offerings," we include the IM offered as part of AOL's basic proprietary Internet access service, AIM, ICQ, any IM that is sponsored by AOL Time Warner and is included in Road Runner, and any new IM-based service that uses the NPD that AOL uses for its IM.

⁴⁹⁹ Cf. 47 C.F.R. § 76.7

⁵⁰⁰ See para. 126F, *supra*.

C. Video Programming

201. In this section, we consider the proposed merger's impact on video programming sold by program networks to MVPDs, who then deliver the networks via their distribution systems to their subscribers' television sets. MVPDs include cable, DBS, multichannel multipoint distribution services ("MMDS"), and satellite master antenna television ("SMATV") providers.⁵⁰¹

202. Companies that own programming networks produce their own programming and/or acquire programming produced by others, then package this programming for sale to MVPDs. As discussed above, Time Warner has ownership interests in a large number of programming networks, such as CNN, TBS, HBO, Comedy Central and Court TV, among others.

203. We examine below whether the merger will create public interest harms with respect to electronic programming guides ("EPGs"), the carriage of analog and digital video signals, or AOL Time Warner's post-merger ownership interest in DirecTV, the nation's largest DBS provider. We conclude that the merger will not result in a violation of the Communication's Act or Commission rules, nor will it interfere with our implementation of the Communications Act or the Commission's policy objectives. Accordingly, we reject commenters' requests that we impose conditions related to video programming.

1. Electronic Programming Guides

204. EPGs are on-screen directories of programming delivered through various means, including cable plant, telephone lines, and over-the-air broadcast signals. Original-generation EPGs are not interactive, but rather continually scroll programming listings. These EPGs are generally delivered as discrete video programming channels. Newer, interactive EPGs, however, allow users to sort and search programming, give program descriptions, provide reminders of upcoming programming, and take users to programming they select. Interactive EPGs can be transmitted via the Vertical Blanking Interval ("VBI")⁵⁰² of analog channels, or may be transmitted as standalone digital data streams. The purchasers of EPGs are MVPDs such as cable and DBS operators, and, potentially, through set-top boxes, individual consumers.⁵⁰³ The sellers of EPGs are EPG companies.⁵⁰⁴ Gemstar, the current market leader in the

⁵⁰¹ See 1999 Competition Report, 15 FCC Rcd at 980 ¶ 3 (generally describing the various types of MVPDs) (Section 628(g) of the Communications Act, 47 U.S.C. § 548(g), requires the Commission to report annually to Congress on the status of competition in markets for the delivery of video programming). DBS operators provide programming via satellite to subscribers that own or lease small-diameter receiving dishes. MMDS providers offer programming via microwave facilities (the service is often referred to as "wireless cable service"). SMATV operators, also known as "private cable operators," also frequently use microwave facilities to transmit programming to subscribers without crossing public rights-of-way. SMATV subscribers usually reside in multiple dwelling units ("MDUs").

⁵⁰² Newton's Telecom Dictionary (11th Ed. 1996) defines the VBI as:

The interval between television frames in which the picture is blanked to enable the trace (which "paints" the screen) to return to the upper left hand corner of the screen, from where the trace starts, once again to paint a new screen.

This time period is the equivalent of 21 scanning lines. The VBI is used to transmit data to organize the television picture, as well as other data. Line 21 of the VBI is reserved for distribution of closed captioning information. See *Closed Captioning and Video Description of Video Programming, Implementation of Section 305 of the Telecommunications Act of 1996, Video Programming Accessibility*, Report, MM Docket No. 95-176, 11 FCC Rcd 19214 (1996).

⁵⁰³ Some set-top boxes and television sets will have EPGs embedded within them.